Steve Lemay, LLC

KIRO TOWER

LEAD HEALTH PROTECTION PLAN

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I. SCOPE

This lead health protection plan policy applies to all Steve Lemay, LLC employees and subcontractors who may be occupationally exposed to lead in the course of their work at the KIRO Tower located at 1518 Queen Anne Avenue North in Seattle, WA. It includes but is not limited to the following:

- Cleaning, preparing, removing, handling, and painting lead coated steel members, gussetts, and other radio tower pieces and parts.
- Lead contamination/emergency spill cleanup, and
- Temporary storage, transportation and disposal, of lead coated materials and waste materials (including PPE) on the site.

Specifically at the KIRO Tower, the work tasks that are anticipated to impact lead or lead containing materials include:

- Grinding, bandsawing, drilling, manually scraping, removing, and loading lead coated steel members, gussetts, and other radio tower pieces and parts.

II. DEFINITIONS

- *Action level* means employee exposure, without regard to the use of respirators, to an airborne concentration of lead equal to 30 $\mu g/m^3$ calculated as an 8-hour time-weighted average (TWA).

- *Permissible exposure limit* (PEL) means employee exposure, without regard to the use of respirators, to an airborne concentration of lead equal to 50 $\mu g/m^3$ calculated as an 8-hour time-weighted average (TWA).

- *Lead in Construction Standard* means WAC 296-155-176, Lead and 29 CFR 1926.62 Lead Exposure in Construction – Interim Final Rule.

III. COMPETENT PERSON

The Lead in Construction Standard (WAC 296-155-176 Lead), WAC 296-155-17605 defines in WAC 296-155-17605 a "competent person" as one who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.

The Lead in Construction Standard requires a written compliance program when construction activities may result in worker exposure to lead. The compliance program must provide for frequent and regular inspections of job sites, materials, and equipment by a competent person. Steve Lemay, LLC also requires each of its subcontractors engaged in work tasks that are anticipated to involve lead and lead painted materials to identify an appropriately trained and authorized competent person to review and monitor the workers performing these tasks.

Qualifications
The competent person must be qualified by virtue of training that meets or exceeds the requirements found in WAC 296-155-176 and has the training or experience necessary to identify potential exposure issues and authority to make changes to achieve compliance with WAC 296-155-176 that include knowledge of the following:

- Relevant hazardous (dangerous) and solid waste handling procedures.
- Relevant portions of the National Ambient Air Quality Standards, OSHA/WISHA general and construction industry standards, EPA solid and hazardous waste regulations, EPA site clean-up and spill response regulations and relevant state and local regulations.
- Different removal methods, types of containment, ventilation controls, environmental controls consistent with same and operation and maintenance of environmental control systems.
- All relevant OSHA/WISHA standards including, but not limited to WAC 296-155-176, Lead; 296-842, Respiratory Protection; and 296-800-140, Accident Prevention Program.

Authority
The competent person shall have the complete support of top management and authority to ensure work tasks the impact lead and lead painted materials are carried out in accordance with compliance plans and governmental regulations. The competent person has the authority to stop non-conforming work tasks, independent of production pressures. The competent person may have additional assignments, and may routinely be a member of the crew that actually performs work on lead coated materials. Provisions shall be made for a back up competent person should the designated competent person be unable to perform his/her duties.

Responsibilities
Responsibilities of the competent person shall include:

- Monitoring effectiveness and ensuring the continued integrity of environmental controls, respiratory protection, and personal protective equipment.
- Observing worker exposure monitoring.
- Insuring that the lead hazards have been communicated to the site personnel.
- Insuring that employees exposed to lead are wearing appropriate personal protective equipment, respiratory protection, and are trained in the use of such equipment.
- Insuring that employees exposed to lead have received training as required by WAC 296-155-176.
- Insuring that any required containment and engineering controls are in use and are in operating condition and functioning properly.
- Insuring that fugitive emissions to air, water, or soil are minimized and that handling of all waste streams is in compliance with applicable regulations and contract specifications.
- Controlling access to the work site and ensuring that regulated area/contamination control boundaries are marked.

IV. EXPOSURE ASSESSMENT

General
Where employees are potentially exposed to lead at the KIRO Tower through operations covered by Section I. of this compliance program, Steve Lemay, LLC and its subcontractors will conduct an exposure assessment in the form of air monitoring to determine actual exposures and to insure proper levels of protection are provided. Where Steve Lemay, LLC and its subcontractors have reason to believe that an employee performing a task may be exposed in excess of the PEL, that employee will be treated as if he/she were exposed above the PEL, with appropriate protective measures in place, until an employee assessment is performed and documented.

Where Steve Lemay, LLC and its subcontractors have previously monitored for exposures, and the data were obtained within the past 12 months during work operations conducted under workplace conditions closely resembling the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the current operations, the subcontractor may rely on such earlier monitoring results to make initial determination of expected exposure levels and appropriate levels of protection to be provided to employees. If it is believed that an employee performing a task may be exposed above the PEL, such a determination will be supported with monitoring of actual exposures for that particular job site, control method or process.

Where Steve Lemay, LLC and its subcontractors have objective data, demonstrating that a particular product or material or a specific process, operation or activity cannot result in employee exposure to lead or other toxic metal at or above the action level during processing, use, or handling, Steve Lemay, LLC and its subcontractors may rely upon such data instead of implementing air monitoring.

Personal Samples
When monitoring is required, personal breathing zone air samples representative of a full shift (6.5 hour minimum) including at least one sample for each job classification/task in each work area either for each shift or for the shift with the highest exposure level ("most contaminated worker") will be collected.

Personal air samples will be collected in accordance with NIOSH Method 7082 (Lead) that recommends a flow rate of 1 to 4 liters per minute and a total sample volume of 200 to 1,200 liters. Eight-hour samples are desirable to facilitate comparison with the PEL and Action Level. Over an 8-hour period, filters may have to be changed several times to prevent overloading, depending upon the air dust level encountered. Collection medium is a closed face mixed cellulose ester filter, 0.8 micrometer pore size, fitted in a 37 millimeter diameter in a 2 or 3-piece cassette. The cassette is attached to tygon tubing, with a 6.4 millimeter outside diameter, hung in worker's breathing zone. Air is drawn through cassette/tubing with a personal sampling pump at 2 to 4 liters per minute. The pump will be calibrated before and after the sample period with either a primary standard or a secondary standard, such as a rotameter, that has been calibrated with a primary standard.

For quality control purposes, a blank air filter sample will be submitted with each group of samples. The collection of blank air samples in the field consists of exposing a filter to the conditions of the field while field sampling is taking place. This filter is handled in the same way as the sample filters except no air is drawn through it.

An Air Sample Data Sheet will be completed while field sampling is taking place. A chain of Custody Form shall also accompany the Air Sample Data Sheet and samples from point of origin to the laboratory.

Samples will be analyzed according to NIOSH Method 7082 by NVL Laboratories (Seattle, WA). NVL Laboratories is AIHA accredited and participates in the ELPAT Program.

Area Samples
Area air samples will be collected at the site boundary to verify that airborne concentrations of lead outside the work area are at or below regulated limits when personal worker exposure is anticipated to exceed the action limit and/or the PEL. A personal sample pump (2-4 Lpm) or a high flow pump (15 Lpm) may be used. Sampling frequency will match the worker exposure sampling schedule. Sample locations will be determined on site but will include at least one sample collected approximately 5' to 10' outside the lead work area approximately 3' to 5' above the ground downwind of the tower based on prevailing wind direction, and be representative of the shift with the highest expected exposure levels.

Area air sampling will be terminated if the sample results are below the action limit and the matching personal air samples are below the PEL.

Notification of Results
Within 5 working days of completion of the exposure assessment the contractor shall notify each employee in writing of the results which represent that employee's exposure. Whenever the results indicate that the representative employee exposure, without regard to respirators, is at or above the PEL, the notification shall include a statement that the PEL was exceeded and a description of the corrective action taken or to be taken to reduce exposure to below that level.

Observation of Monitoring
Steve Lemay, LLC and its subcontractors shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposures. Whenever observation of monitoring requires entry into an area where the use of respirators, protective clothing or equipment is required, the contractor shall provide the observer with and assure the use of such respirators, clothing and equipment, and shall require the observer to comply with all other applicable safety and health procedures. Without interfering with the monitoring, observers shall be entitled to: receive an explanation of the measurement procedures; observe all steps related to the monitoring performed at the place of exposure, and record the results obtained or receive copies of the results when returned by the laboratory.

V. METHODS OF COMPLIANCE

Engineering and Work Practice Controls
Engineering and work practice controls are the preferred method to reduce and maintain employee exposures below the permissible exposure limit and shall be implemented wherever feasible. The work will be performed from man-rated personnel platforms/crane style man baskets platforms and manlift baskets at significant heights above the ground (30' and higher). Where all feasible engineering and work practices controls that can be instituted are not sufficient to reduce employee exposure to or below the permissible exposure limit, they shall be supplemented by the use of respiratory protection. Control methods to be considered include, but might not be limited to:

- Isolation/containment of work area/work space using a cinch bag
- HEPA-vacuum shrouded power tools vs. conventional power tools; and
- Local exhaust at point of disturbance (HEPA-filtered vacuum cleaners applied at the point of use).

Compliance Program
This compliance program shall be supplemented with the written site specific plan elements (see Section XIII) to be developed and implemented prior to commencement of each job where exposure above the action level is anticipated or documented. The plan shall include at least the following:

- a description of each activity in which lead is emitted (equipment used, material involved, controls in place);
- a description of the specific means that will be employed to achieve compliance;
- engineering controls considered and selected for controlling exposure;
- air monitoring strategy to be employed on project;
- appropriate level of respiratory protection anticipated;
- protective work clothing and equipment;
- acceptable housekeeping practices;
- and a description of the hygiene facilities that will be provided.

Written programs shall be submitted upon request to any affected employee or authorized employee representatives, the Assistant Secretary of Labor, and the Director of the Washington State Department of Occupational Safety and Health, and shall be available at the work site.

Inspections
Frequent and regular inspections of job sites, materials, and equipment are to be made by a competent person.

VI. RESPIRATORY PROTECTION

General
The contractor shall provide, at no cost to the employee, and assure the use of respirators under the following circumstances:

- During the initial exposure assessment;
- Whenever an employee's exposure exceeds, or may be expected to exceed the PEL;
- In work situations in which engineering controls and work practices are not sufficient to reduce exposures to or below the PEL;
- When exposure assessment or objective data has not yet shown employee exposures to be below the PEL;
- and whenever an employee requests a respirator.

Program Administrator
The Steve Lemay, LLC and its subcontractors shall provide the name of the Respiratory Protection Program Administrator. The Steve Lemay Program Administrator is Wade Lawyer.

Limitations
The respiratory program administrator or his/her designee, using guidelines established by a physician, shall determine whether or not a person may be assigned to a task requiring the use of a respirator. Persons with physical disabilities such as, but not limited to, respiratory impairments, or claustrophobia when wearing a respirator, shall not be assigned to tasks requiring the use of respirators unless it has been determined by a physician that they are physically able to perform the work and use the equipment.

Selection
Only NIOSH/MSHA-approved respirators shall be used. Respirators shall be selected from the table below:

Respirator Selection	Protection Factor	Maximum Airborne Lead Concentration
Half-mask w/HEPA (P-100) cartridge	10	500μg/m^3
Full-face-piece w/HEPA cart.	50	2,500μg/m^3
Full-face-PAPR w/HEPA cart.	50	2,500μg/m^3
Full-face constant flow	1000	50,000μg/m^3
Full-face pressure demand	2000	100,000μg/m^3

Training
To ensure the proper and safe use of a respirator, the minimum training of each respirator wearer shall include:

- the respiratory hazard to which the person may be exposed;
- an explanation of the engineering controls in place and whether those controls are sufficient to reduce or eliminate the need for respirators;
- an explanation of why a particular type of respirator has been selected for a specific respiratory hazard;
- an explanation of the operation, capabilities and limitations of the respirator selected;
- instruction in inspecting, donning, checking the fit of, and wearing the respirator;
- an explanation of how maintenance and storage of the respirator is carried out;
- how to recognize and cope with emergency situations,
- and regulations concerning respirator use.

Medical Evaluation & Fit Testing
Employees shall not be assigned to tasks requiring the use of respirators unless it has been determined by a qualified physician that they are physically able to use the equipment. Medical evaluation and fit testing will conform to the requirements of the

subcontractor's Respiratory Protection Program and WAC 296-842. Each employee will check the fit of his/her respirator by performing a positive pressure (exhalation) and negative pressure (inhalation) fit check every time he/she dons a respirator.

Maintenance and Storage
Employees will be provided with facilities and materials for cleaning and sanitizing respirators. Respirators are to be stored in a manner that will protect them against dust, sunlight, heat extreme cold, excessive moisture, contaminants or damaging chemicals. Respirators shall be stored to prevent distortion of rubber or other elastomeric parts. Employees are responsible for cleaning and for proper storage of respirators that they have been issued. Employees will inspect respirators before and after each use. If a defect is detected, the employee shall return it to his/her supervisor who shall see that it is removed from service until such time that it has been repaired and deemed usable by a qualified person.

VII. REGULATED WORK AREA

General
A regulated work area is any area where employees are potentially exposed to airborne concentrations of lead above the action level and must be identified as such. No food, beverages, tobacco products or cosmetics are allowed to be present, consumed or applied in the area. The aerial work platforms/baskets, manlift, waste metal staging area(s), and waste storage container areas are considered to be regulated areas.

Warning Signs
Warning signs will be placed at all entrances and access points to the regulated work area. Signs will be posted on the aerial work platforms/baskets, manlifts, and at the perimeter of the waste staging area and waste storage container area. Signs must be kept clean and illuminated as necessary so that the message is readily visible. Warning signs for lead will include the following message:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

Access
Personnel access to a regulated work area will be limited to employees who have received training as outlined in section XI. All personnel entering the work area are required to wear personal protective clothing and respiratory protection appropriate to the level of anticipated exposure.

Containment
The degree of containment of the work area will depend upon the engineering controls in place, removal methods to be used and airborne lead levels anticipated for the individual work site and the specification. Barrier tape and warning signs, at a minimum, are required on all ground level sites to identify the regulated work area. Negative pressure differentials or full containment under negative pressure may be appropriate for operations generating large quantities of dust indoors, however, they are not appropriate or practical for aerial platforms/baskets, manlift baskets, or outdoors for the type of work being performed at the KIRO Tower.

Housekeeping
All surfaces are to be maintained as free as practicable of accumulations of lead, dust, and other contaminants. Wherever possible, floors and other surfaces where contaminants accumulate shall be cleaned by vacuuming or other methods that minimize airborne concentrations. Vacuums shall be equipped with HEPA filters and used and emptied in a manner which minimizes the re-entry of contaminants into the work area. Wet shoveling, wet sweeping, or wet brushing may be used only where vacuuming has been tried and found to be ineffective. Compressed air may be used to remove dust from surfaces **only when used in conjunction with a ventilation system designed to capture the airborne dust created by the compressed air**.

VIII. PROTECTIVE WORK CLOTHING AND EQUIPMENT

General
Where employees are exposed to lead above the PEL without regard to respirators, Steve Lemay, LLC and its subcontractors will provide appropriate protective work clothing and equipment that prevents contamination of the employee and the employee's garments. Protective clothing and equipment will be repaired or replaced as needed to maintain its effectiveness. Removal of dust from clothing or equipment by blowing, shaking, or any other method which disperses contaminants into the air is prohibited.

Clothing
Where employees are exposed to contaminants above the PEL, disposable or launderable clothing will be provided in a clean and dry condition at least weekly and daily where employees' exposure levels are above 200 $\mu g/m^3$ lead as an 8-hour TWA. Such clothing will include whole body clothing, head coverings, rubber boots or foot coverings, and gloves. All protective clothing will be removed at the completion of a work shift only in identified changing areas and will be placed in a closed container to prevent dispersion of lead. Protective clothing may also be placed directly in lead waste containers for disposal

as lead waste. Containers of lead contaminated protective clothing are to be labeled as follows:

CAUTION: Clothing contaminated with lead. Do not remove dust by blowing or shaking. Dispose of lead contaminated wash water in accordance with applicable local, state or federal regulations.

Equipment
Personal protective equipment (PPE) such as safety glasses, goggles and/or face shields will be used to prevent contaminants from coming into contact with employee's eyes and face. PPE and other required safety equipment (i.e. full body harness, lanyard, fall protection, and etc.) are to be removed at the completion of a work shift only in identified changing areas. Removal of dust from equipment by blowing, shaking, or any other method which disperses contaminants into the air is prohibited.

IX. HYGIENE FACILITIES AND PRACTICES

Change Areas
Where airborne exposure levels are above the PEL, performing lead work activities, and during the initial exposure assessments, employees will be provided clean change areas. Change areas will allow for separate storage of protective clothing and equipment from street clothes to prevent cross-contamination. Employees will not be allowed to leave the workplace wearing protective clothing and equipment that has been required to be worn during the work shift.

Eating Facilities
Where airborne exposure levels are above the PEL, employees will be provided lunchroom facilities or eating areas that are readily accessible but separate from the work area. These facilities are to be maintained as free as practicable from contamination. Employees may not enter eating areas with protective work clothing or equipment unless surface dust has been removed by HEPA-vacuuming, down draft booth, or other cleaning method that effectively limits dispersion of contaminants. Employees must wash their hands and face prior to eating, drinking, smoking or applying cosmetics.

Hand Washing Facilities
Employees will be provided hand washing facilities. Clean water, hand soap, industrial hand cleaner or similar cleansing agents shall be provided. Individual towels (paper or cloth) shall be provided. Employees must wash their hands and face prior to eating, drinking, smoking or applying cosmetics.

Showers
Where airborne exposure levels are above the PEL, employees will be provided, where feasible, with showers. Where shower facilities are provided, employees must shower at the end of the work shift. An adequate supply of towels and cleansing agents will be maintained on site. Where showers are not provided, employees must wash their hands and face at the end of the work shift and should shower immediately upon returning to their residence.

X. MEDICAL SURVEILLANCE

General
Steve Lemay, LLC and its subcontractors shall make provide medical surveillance to employees with occupational exposures to lead per WAC 296-155-176 (i.e. during the initial exposure assessment and when exposures are above the action level). Occupational exposures where required by a comprehensive health standard, for example, lead. All medical procedures and examinations will be conducted under the supervision of a licensed physician without cost to employees.

Biological Monitoring for Lead
Biological monitoring shall be provided for any employee with occupational exposure above the action level for a single day. Only laboratories approved by OSHA will be used for analysis of blood for lead and zinc protoporphyrin (ZPP). Biological monitoring will be conducted according to the following schedule:

- Prior to assignment and the initial exposure assessment and when personal exposure is above the action level;
- Every two months or upon completion of the lead project for the first 6 months, whichever comes first;
- Upon completion of the lead project or reassignment to another project, whichever comes first, and
- Within two weeks after receiving results of a blood lead level test at or above 40ug/dl and at least monthly thereafter until two consecutive sampling results indicate a blood lead level below 40ug/dl, and annually thereafter.

Within five working days after receipt of biological monitoring results employees are to be notified in writing of their blood lead level. Any employee whose blood lead level exceeds the numerical criterion for medical removal will be notified that the standard requires temporary medical removal with medical removal protection benefits.

Medical Examinations for Lead

Medical surveillance in the form of examinations will be made available to employees occupationally exposed to lead above the action level for 30 or more days a year according to the following schedule:

- At least annually for each employee for whom a blood sampling test conducted in the previous 12 months indicated a blood lead level at or above 40ug/dl;
- As soon as possible, upon notification, that an employee has developed signs or symptoms commonly associated with lead intoxication, that the employee desires medical advice concerning the employee's ability to procreate a healthy child, that the employee is pregnant, or that the employee has demonstrated difficulty in breathing while being fitted for or using a respirator, and
- When an employee has been removed from exposures due to an elevated blood lead level.

Steve Lemay, LLC and its subcontractors shall provide the physician conducting a medical examination or consultation with the following information:

- A copy of the Lead Standard including all Appendices;
- A description of the affected employee's duties as they relate to the employee's exposure;
- The employee's exposure level or anticipated exposure level to lead and to any other toxic substance (if applicable);
- A description of any personal protective equipment used or to be used;
- Prior blood lead determinations; and
- All prior written medical opinions concerning the employee in VDC's and its subcontractor's possession or control.

Chelation

No person that Steve Lemay or its subcontractors retain, employ, supervise or control will engage in prophylactic chelation of any employee at any time. Therapeutic or diagnostic chelation is to be conducted only under the supervision of a licensed physician in a clinical setting with thorough and appropriate medical monitoring and the employee is to be notified in writing prior to its occurrence.

Medical Removal for Lead
If an employee's blood lead level is at or above 40ug/dl, the employee will be removed from further exposure to lead at or above the action level. The employee will be evaluated by a licensed physician. Additional biological monitoring in the form of blood sampling and analysis will be conducted within two weeks and at least monthly thereafter until two consecutive blood sampling tests indicate the employee's blood lead level is below 40ug/dl. The employee may then be returned to the employee's former job status with the approval of the examining physician.

An employee will be removed from further exposure to lead at or above the action level on each occasion that a final medical determination results in a medical finding, determination, or opinion that the employee has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead. The employee may be returned to the employee's former job status when a subsequent final medical determination results in a medical finding, determination, or opinion that the employee no longer has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead.

The multiple physician review mechanism and medical removal benefits protection identified in WAC 296-155-175, Lead will be provided to all covered employees.

XI. EMPLOYEE INFORMATION AND TRAINING

General
The subcontractor will communicate information concerning health hazards, according to the requirements of the Hazard Communication Standard, to all employees. Additional training shall be provided where required by a comprehensive health standard or where employees are exposed above the action level for lead.

Content of the training will include:

- The health hazards associated with exposure;
- The specific nature of operations that could result in exposure, especially exposures above the PEL;
- The engineering controls and work practices associated with the employee's job assignment;
- The measures employees can take to protect themselves from exposure such as personal hygiene;
- The specific procedures the subcontractor has implemented to protect employees from exposure such as engineering controls; appropriate work practices and personal protective equipment;
- The purpose, proper selection, fitting, proper use, and limitations of respirators and protective clothing;
- The purpose and a description of the medical surveillance program where required;
- Applicable regulations;
- The employee's rights of access to records, and

- Additional access to information and training programs and materials.

Training Program for Lead

Any employee who is subject to exposure at or above the action level will receive additional training as outlined in the Construction Lead Standard prior to assignment to a lead removal project and annually thereafter if the employee's job status continues to expose the employee to lead at or above the action level. A copy of the Standard and its appendices will be made available to affected employees.

Content of the Lead Training Program will include:

- The content of the Construction Lead Standard and its appendices;
- The specific nature of the operations which could result in exposure to lead or other hazardous materials above the action level;
- The purpose, proper selection, fitting, use, and limitations of respirators;
- The purpose and a description of the medical surveillance program;
- Information concerning the adverse health effects associated with excessive exposure to lead with particular attention to the adverse reproductive effects on both males and females, hazards to the fetus and additional precautions for employees who are pregnant;
- The purpose and a description of the medical removal protection program;
- The engineering controls and work practices associated with the employee's job assignment including training of employees to follow relevant good work practices described in Appendix B of the Standard;
- The contents of any compliance plan in effect;
- Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician;
- The employee's right of access to records, information and training materials;
- Procedures for handling hazardous materials and waste, and
- Proper operation of environmental control systems and/or removal tools and equipment as appropriate to their work assignment.

Documentation

Affected employees' lead training will be verified by written documentation, letter, or certificate.

XII. RECORD KEEPING

Steve Lemay, LLC and its subcontractors will maintain an accurate record and make available to employees:

- All monitoring and other data used in conducting employee exposure assessments;
- All results of biological monitoring and medical examinations associated with the medical surveillance program;
- All medical opinions and determinations related to the medical removal program, and
- All other records, data and results required by the Construction Lead Standard and other applicable safety and health standards.

XIII. KIRO TOWER SITE SPECIFIC PLAN ELEMENTS

Specifically at the KIRO Tower, the work tasks that are anticipated to impact lead or lead containing materials include:

- Manual scraping of lead coated steel;
- Grinding, bandsaw cutting, and drilling of lead coated steel;
- Lifting and lowering (for removal or replacement) of lead coated steel;
- Painting of lead coated steel; and
- Staging/holding of lead coated steel and PPE as waste/recyclable material.

Manual scraping of lead coated steel

The scraping of lead coated steel (e.g. gusset, diagonals, etc.) will take place above the ground and will be accessed by man-rated personnel platforms/crane style man baskets platforms and manlift baskets at significant heights above the ground (30' and higher). Scraping will take place inside an enclosed bag that will be cinched around the work surface/material. The cinch bag will completely surround/enclose the working surface/material. Scraping will be performed manually using handheld tools inside the bag. Scraping is a gross removal activity that will produce large paint chips and rusted metal pieces that will be contained inside the cinch bag. The scraper(s) and waste paint chips and rusted metal pieces will remain inside the bag after it is removed from the working surface/material for attachment and reuse at the next working surface/material site/location. At the end of the work or after the bag is filled, the bag will be brought to the ground staging area by the worker where the scraper will be removed from the bag and cleaned using damp microfiber cloths (e.g. baby wipes), and the waste paint chips and rust metal pieces will be loaded into a secured steel or plastic barrel supplied by the waste hauler or recycler. The waste barrel will be for lead contaminated waste only, appropriately signed/labeled, and set upon 6 mil or greater durable plastic sheet that is intended to capture fallen lead paint chips or rusted metal pieces. The plastic sheeting will be cleaned at the end of the shift by HEPA-vacuuming and/or damp wiping to remove settled dust. The plastic sheeting will be disposed of as non-recycled waste. The use of additional engineering or administrative controls is not anticipated. Personal exposure monitoring to confirm worker exposures are below the PEL and Action Level.

Workers will wear typical safety clothing per Steve Lemay LLC's health and safety program and workers will wear half-face negative pressure air purifying respirators equipped with P-100 (HEPA) filter cartridges in addition to their standard construction work clothing and PPE (e.g. safety shoes, hard hat, hearing protection, safety glasses, nitrile gloves under their work gloves, etc.) when engaged in manual scraping. Workers will clean up accumulations of lead containing paint chips and rusted metal pieces from the aerial platform/basket or manlift basket, and waste staging/storage work area before they leave the area for breaks or at the end of their work shift using a HEPA-filtered vacuum cleaner and/or damp wiping with microfiber cloths. Workers will remove their respirators at the transition point between the work areas (aerial platforms/baskets, manlifts, and waste staging/storage areas) and the surrounding area. If disposable coveralls are worn, they will be placed in sealed bags or lead waste disposal barrel/drums or dumpsters and non-recyclable waste at the end of each work shift at the transition point. Lead-containing non-recycled waste will be stored in segregated waste containers or dumpsters pending the results of the waste characterization test (TCLP) by Pacific Industrial Hygiene LLC. Waste "failing" the TCLP test will be disposed as Dangerous Waste. Waste "passing" the TCLP test can be disposed of as general construction debris. Workers will be provided with handwashing facilities. Exposures above the PEL and Action Level are not anticipated, however, if the PEL is exceeded, a separate change room, eating area, and shower facility will be provided.

Grinding, bandsaw cutting, and drilling of lead coated steel

The grinding, bandsaw cutting, and drilling of lead coated steel (e.g. gusset, diagonals, etc.) will take place above the ground and will be accessed by suspended aerial platforms/baskets or manlift baskets. Grinding, bandsaw cutting, and drilling will take place using shrouded tools equipped with HEPA-filtered vacuum cleaners to capture lead containing paint chips and rusted metal pieces. In the event that shrouded tools are impractical to use or create a greater safety hazard for the worker, the work process will take place inside an enclosed bag that will be cinched around the work surface/material. The cinch bag will completely surround/enclose the working surface/material. Scraping will be performed manually using handheld tools inside the bag. Grinding is expected to produce more small particulate matter and shrouding is a necessity, as compared bandsaw cutting and drilling because the latter two activity are a gross removal activity that will produce large paint chips and rusted metal pieces. The bandsaw, or drill, and waste paint chips and rusted metal pieces will remain inside the bag after it is removed from the working surface/material for attachment and reuse at the next working surface/material site/location. At the end of the work or after the bag is filled, the bag will be brought to the ground staging area by the worker where the bandsaw or drill will be removed from the bag and cleaned using damp microfiber cloths (e.g. baby wipes), and the waste paint chips and rust metal pieces will be loaded into a secured steel or plastic barrel supplied by the waste hauler or recycler. The waste barrel will be for lead contaminated waste only, appropriately signed/labeled, and set upon 6 mil or greater durable plastic sheet that is intended to capture fallen lead paint chips or rusted metal pieces. The plastic sheeting will be cleaned at the end of the shift by HEPA-vacuuming and/or damp wiping to remove settled dust. The plastic sheeting will be disposed of as non-recycled waste. The use of additional engineering or administrative controls is not anticipated. Personal

exposure monitoring to confirm worker exposures are below the PEL and Action Level. Workers will wear typical safety clothing per Steve Lemay LLC's health and safety program and workers will wear half-face negative pressure air purifying respirators equipped with P-100 (HEPA) filter cartridges in addition to their standard construction work clothing and PPE (e.g. safety shoes, hard hat, hearing protection, safety glasses, nitrile gloves under their work gloves, etc.) when engaged in grinding, bandsaw cutting, and drilling. Workers will clean up accumulations of lead containing paint chips and rusted metal pieces from the aerial platform/basket or manlift basket, and waste staging/storage work area before they leave the area for breaks or at the end of their work shift using a HEPA-filtered vacuum cleaner and/or damp wiping with microfiber cloths. Workers will remove their respirators at the transition point between the work areas (aerial platforms/baskets, manlifts, and waste staging/storage areas) and the surrounding area. If disposable coveralls are worn, they will be placed in sealed bags or lead waste disposal barrel/drums or dumpsters and non-recyclable waste at the end of each work shift at the transition point. Lead-containing non-recycled waste will be stored in segregated waste containers or dumpsters pending the results of the waste characterization test (TCLP) by Pacific Industrial Hygiene LLC. Waste "failing" the TCLP test will be disposed as Dangerous Waste. Waste "passing" the TCLP test can be disposed of as general construction debris. Workers will be provided with handwashing facilities. Exposures above the PEL and Action Level are not anticipated, however, if the PEL is exceeded, a separate change room, eating area, and shower facility will be provided.

Lifting and lowering (for removal or replacement) of lead coated steel

The lifting and lowering of lead coated steel will be performed using standard rigging materials and techniques. Padding will be used on lead coated metal pieces that have flaking paint that will be removed from the tower where the rigging is expected to contact the flaking paint. The purpose of the padding is to prevent flaking or capture/hold flaking paint chips in place. Lead coated metal components will be lowered from the tower to the staging/hold area and will be moved to the waste storage/staging area where they will be placed in the lead waste recycling dumpster. The use of additional engineering or administrative controls is not anticipated. Personal exposure monitoring to confirm worker exposures are below the PEL and Action Level will be performed. Workers will wear typical safety clothing per Steve Lemay LLC's health and safety program. Workers are not require to wear respiratory protection during lifting and lowering steel. Workers will clean up accumulations, if any, of lead containing paint chips and rusted metal pieces from the staging/storage work area before they leave the area for breaks or at the end of their work shift using a HEPA-filtered vacuum cleaner and/or damp wiping with microfiber cloths. Workers will wear half-face negative pressure air purifying respirators equipped with P-100 (HEPA) filter cartridges in addition to their standard construction work clothing and PPE when engaged in clean up of accumulations of lead containing paint chips and rusted metal pieces. Workers will remove their respirators at the transition point between the work areas (aerial platforms/baskets, manlifts, and waste staging/storage areas) and the surrounding area. If disposable coveralls are worn, they will be placed in sealed bags or lead waste disposal barrel/drums or dumpsters and non-recyclable waste at the end of each work shift at the transition point. Lead-containing

non-recycled waste will be stored in segregated waste containers or dumpsters pending the results of the waste characterization test (TCLP) by Pacific Industrial Hygiene LLC. Waste "failing" the TCLP test will be disposed as Dangerous Waste. Waste "passing" the TCLP test can be disposed of as general construction debris. Workers will be provided with handwashing facilities. Exposures above the PEL and Action Level are not anticipated, however, if the PEL is exceeded, a separate change room, eating area, and shower facility will be provided.

Painting of lead coated steel

Non-lead containing paint will be brush applied to cleaned metal surfaces and will also overlap onto lead containing painted/coated surfaces. Contact with the lead containing painted/coated surfaces is not expected to produce any lead aerosol or lead inhalation hazard. Personal exposure monitoring to confirm worker exposures are below the PEL and Action Level will be performed. The use of additional engineering or administrative controls is not anticipated. Workers will wear typical safety clothing per Steve Lemay LLC's and painting subcontractor's health and safety program and workers will wear their standard construction work clothing and PPE (e.g. safety shoes, hard hat, hearing protection, safety glasses, nitrile gloves under their work gloves, etc.). Workers are not required to wear half-face negative pressure air purifying respirators equipped with P-100 (HEPA) filter cartridges during painting. Personal exposure monitoring to confirm worker exposures are below the PEL and Action Level. Exposures above the PEL and Action Level are not anticipated, however, if the PEL is exceeded, a separate change room, eating area, and shower facility will be provided.

Staging/holding of lead coated steel and PPE as waste/recyclable material

The staging/holding of lead coated steel and lead contaminated PPE as waste/recyclable material will be performed by the same workers using the same PPE, controls and methods described work tasks. Personal exposure monitoring to confirm worker exposures are below the PEL and Action Level will be performed. The use of additional engineering or administrative controls is not anticipated. Workers will wear typical safety clothing per Steve Lemay LLC's health and safety program and workers will wear half-face negative pressure air purifying respirators equipped with P-100 (HEPA) filter cartridges in addition to their standard construction work clothing and PPE (e.g. safety shoes, hard hat, hearing protection, safety glasses, nitrile gloves under their work gloves, etc.). Personal exposure monitoring to confirm worker exposures are below the PEL and Action Level. Exposures above the PEL and Action Level are not anticipated, however, if the PEL is exceeded, a separate change room, eating area, and shower facility will be provided.

Exposure and area monitoring

Personal exposure and adjacent area air monitoring will be performed on a task basis as best as it can be accommodated because much of the work will be performed on aerial platforms/baskets or manlifts. Many of the work tasks will be performed well above ground and sequentially, and that makes monitoring each task individually impractical if not impossible. Air sampling will be conducted in accordance with the methods described

in this plan. Perimeter area air monitoring will be performed at downwind locations at the site perimeter.

Waste characterization

The entire waste stream that will be generated at the KIRO is comprised of recycled and non-recycled wastes. The lead-containing waste and debris will not be included in the non-recycled waste. The non-recycled waste stream to be sampled and analyzed for characterization purposes (TCLP) includes the following materials and their estimated percent volume contribution to the total:

1. 20% Paint chips and rusted metal pieces;
2. 80% Used PPE and plastic sheeting.

Steve Lemay LLC understands that the Pacific Industrial Hygiene LLC will collect a 200 gram sample of these materials in the above percentages from materials in place for waste characterization purposes.